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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,181	12/08/2003	Troy Alan Brown	10734.4801	2910

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EXAMINER

GROSSO, HARRY A

ART UNIT PAPER NUMBER

3727

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,181

Applicant(s)

BROWN ET AL.

Examiner

Harry A. Grosso

Art Unit

3727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 18-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 13-17 and 22-25 is/are rejected.
- 7) ☒ Claim(s) 10 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The objection to the specification has been overcome by the amendment filed March 10, 2006.

The rejection of claims 1, 8 and 11-14 has been overcome by the amendment filed March 10, 2006. The rejection is withdrawn.

Claims 24 and 25 are written in "means plus function" form and since they meet the analysis set forth in MPEP 2181, the Examiner assumes that applicant wishes to invoke 35 USC § 112, paragraph 6.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9, 11, 13-17 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bachmann, of record.

3. Regarding claims 1 and 2, Bachmann discloses the lining system with an outer section (21', 21", Figure 9, column 10, lines 40-61), an inner section (23), interstitial space (19) with a vertical volume area and a horizontal volume area and a negative pressure (vacuum) in the interstitial area (column 8, lines 14-21). The vacuum is continuous while applied and is capable of being applied on a continuous basis. The term sufficient is a broad term and the vacuum applied in Bachmann is sufficient for its purpose.

4. Regarding claim 3, Bachmann discloses the lining system of claim 1 with an L-shaped member having a vertical end and a horizontal end, which is connected to the floor surface (25, Figure 9, column 7, lines 60-67).
5. Regarding claim 4, Bachmann discloses the lining system of claim 1 with bottom plates (25, 27, Figure 9) overlaying the original flooring.
6. Regarding claim 5, Bachmann discloses the lining system of claim 3 with the vertical portion of layer 27 constituting the shell skirt attached to the vertical end of the L-shaped member.
7. Regarding claim 6, Bachmann discloses the lining system of claim 3 and the horizontal portion of layers 27, 29, 30 constitute bottom plates attached to the horizontal end of the L-shaped member.
8. Regarding claim 7, Bachmann discloses the lining system of claim 5 and the top section of the shell skirt is attached to the vertical outer section at a predetermined height that could be chosen to avoid a critical stress area (10', Figure 9).
9. Regarding claim 8, Bachmann discloses the lining system of claim 6 and the shell skirt and bottom plates are attached to the L-shaped members (column 7 lines 19-21 and 28-30).
10. Regarding claim 9, Bachmann discloses the lining system of claim 3 and the ridges on the bottom of member 25 constitute the divider plates.
11. Regarding claim 11, Bachmann discloses the lining system of claim 9 and the bottom ridge at the joint between the outer wall (21") and the floor (21') has a rolled up end and the divider plate is attached to the outer section.

12. Regarding claim 13, Bachmann discloses the lining system of claim 11 and the inner section includes bottom plates (27, 29) sealingly attached to the divider plate through member 25 (column 7, lines 19-25).

13. Regarding claim 14, Bachmann discloses the lining system of claim 13 and a portion of the interstitial space is formed by the bottom plate and a plurality of L-shaped members, which includes the divider plates, being placed in the outer section (column 7, lines 60-65).

14. Regarding claim 15, Bachmann discloses the lining system of claim 3 with a sensor (24) in sensing communication with the interstitial space (column 8, lines 19-21).

15. Regarding claims 16 and 17, Bachmann discloses the lining system of claim 3 and that member 27 is made of epoxy and the upper surface of member 27 would constitute a buffer lining.

16. Regarding claim 22, Bachmann discloses the lining system with an outer section (21', 21*), an inner section (23) having a shell skirt attached to an L-shaped member as discussed in paragraph 12 above, a plurality of bottom plates attached to the L-shaped member as discussed in paragraph 13 above and a vacuum in the interstitial space (column 8, lines 14-21). The vacuum is continuous while applied and is capable of being applied on a continuous basis. The examiner considers the phrase "formed from cost-saving template" to be a product by process limitation that does not materially affect structure.

17. Regarding claim 23, Bachmann discloses the lining system divider plates, the ridges on the bottom of member 25 that are capable of dividing the tank into two or

more sealed sections.

18. Claims 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Mogel (4,916,939).

19. Regarding claim 24, Mogel discloses a lining system capable of use with a fluid container having means for forming an inner layer (1, Figures 1-4, column 4, lines 44-55) and an outer layer (2), both of steel plate with an interstitial space (8) between the layers and a means for forming a negative pressure between the layers (column 4, lines 60-66) and means for dividing the system into two or more independently sealed sections (column 5, lines 34-56). The system is capable of functioning as required by the claim.

20. Regarding claim 25, Mogel's system provides means for flushing an area below a sealed section (37, 38, Figure 4, column 6, line 65 to column 7, line 4).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. In the alternative, claims 1-9, 11, 13-17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann in view of Hendershot et al (5,117,677).

23. Regarding claim 1, Bachmann discloses the lining system with an outer section (21', 21", Figure 9, column 10, lines 40-61), an inner section (23), interstitial space (19) with a vertical volume area and a horizontal volume area and a negative pressure

(vacuum) in the interstitial area (column 8, lines 14-21). Bachmann does not teach the vacuum is continuous. Hendershot et al discloses a tank with an inner lining and an outer lining and continuous negative pressure in the interstitial space for leak monitoring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a continuous negative pressure in the interstitial space as disclosed by Hendershot et al in the system disclosed by Bachmann to provide for continuous leak monitoring.

24. Regarding claim 2, Bachmann discloses the lining system with a vertical volume area and a horizontal volume area.

25. Regarding claim 3, Bachmann discloses the lining system of claim 1 with an L-shaped member having a vertical end and a horizontal end, which is connected to the floor surface (25, Figure 9, column 7, lines 60-67).

26. Regarding claim 4, Bachmann discloses the lining system of claim 1 with bottom plates (25, 27, Figure 9) overlaying the original flooring.

27. Regarding claim 5, Bachmann discloses the lining system of claim 3 with the vertical portion of layer 27 constituting the shell skirt attached to the vertical end of the L-shaped member.

28. Regarding claim 6, Bachmann discloses the lining system of claim 3 and the horizontal portion of layers 27, 29, 30 constitute bottom plates attached to the horizontal end of the L-shaped member.

29. Regarding claim 7, Bachmann discloses the lining system of claim 5 and the top section of the shell skirt is attached to the vertical outer section at a predetermined

height that could be chosen to avoid a critical stress area (10', Figure 9).

30. Regarding claim 8, Bachmann discloses the lining system of claim 6 and the shell skirt and bottom plates are attached to the L-shaped members (column 7 lines 19-21 and 28-30).

31. Regarding claim 9, Bachmann discloses the lining system of claim 3 and the ridges on the bottom of member 25 constitute the divider plates.

32. Regarding claim 11, Bachmann discloses the lining system of claim 9 and the bottom ridge at the joint between the outer wall (21") and the floor (21') has a rolled up end and the divider plate is attached to the outer section.

33. Regarding claim 13, Bachmann discloses the lining system of claim 11 and the inner section includes bottom plates (27, 29) sealingly attached to the divider plate through member 25 (column 7, lines 19-25).

34. Regarding claim 14, Bachmann discloses the lining system of claim 13 and a portion of the interstitial space is formed by the bottom plate and a plurality of L-shaped members, which includes the divider plates, being placed in the outer section (column 7, lines 60-65).

35. Regarding claim 15, Bachmann discloses the lining system of claim 3 with a sensor (24) in sensing communication with the interstitial space (column 8, lines 19-21).

36. Regarding claims 16 and 17, Bachmann discloses the lining system of claim 3 and that member 27 is made of epoxy and the upper surface of member 27 would constitute a buffer lining.

37. Regarding claim 22, Bachmann discloses the lining system with an outer section

(21', 21*), an inner section (23) having a shell skirt attached to an L-shaped member a discussed in paragraph 12 above, a plurality of bottom plates attached to the L-shaped member as discussed in paragraph 13 above and a vacuum in the interstitial space (column 8, lines 14-21). Bachmann does not teach the vacuum is continuous.

Hendershot et al discloses a tank with an inner lining and an outer lining and continuous negative pressure in the interstitial space for leak monitoring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the use of a continuous negative pressure in the interstitial space as disclosed by Hendershot et al in the system disclosed by Bachmann to provide for continuous leak monitoring. The examiner considers the phrase "formed from cost-saving template" to be a product by process limitation that does not materially affect structure.

38. Regarding claim 23, Bachmann discloses the lining system divider plates, the ridges on the bottom of member 25 that are capable of dividing the tank into two or more sealed sections.

Allowable Subject Matter

39. Claims 10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

40. Applicant's arguments filed March 10, 2006 have been fully considered but they are not persuasive. Applicant argues that the negative pressure in Bachmann is not continuous and is for a different purpose than in applicant's invention. In response, the negative pressure of Bachmann is continuous while applied and is capable of being continuous over a longer period. The purpose of the negative pressure constitutes intended use and does not affect the structure of the invention. Additionally, the prior art of Hendeshot et al has been included as a teaching of continuous negative pressure for leak monitoring.

41. Applicant's arguments with respect to claims 24 and 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

This Office Action is non-final due to the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry A. Grosso whose telephone number is 571-272-4539. The examiner can normally be reached on Monday through Thursday from 7am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Newhouse can be reached on 571-272-4544. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hag

Harry A. Grosso
Examiner
Art Unit 3727



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SUPERVISORY PATENT EXAMINER